Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (original) A method for initializing an equalizer in an Orthogonal Frequency Division Multiplexing ("OFDM") receiver, the method comprising the steps of:

generating a channel estimate based on a received OFDM training symbol and a first quantity;

generating a second quantity based on a quantized magnitude squared of the channel estimate;

generating an equalizer tap setting based on a complex conjugate of the channel estimate and the second quantity;

generating an error based on a difference between one and a product of an existing equalizer tap setting and the channel estimate;

generating a subsequent equalizer tap setting based on the error and the existing equalizer tap setting; and

repeating the steps of generating the error and generating the subsequent equalizer tap setting until the error falls within predetermined limits.

6. (original) The method of claim 5, wherein the step of generating the subsequent equalizer tap setting includes generating the subsequent equalizer tap setting based on a least-mean-squares ("LMS") algorithm.

7. (original) The method of claim 5, wherein the step of generating the channel estimate includes receiving the training symbol over a wireless local area network.

8. (original) The method of claim 5, wherein the step of generating the channel estimate includes receiving the training symbol into at least one of a portable computer and a desktop computer.

9. (currently amended) The method of claim 5, wherein the step of generating the channel estimate includes:

retrieving an inverse of a reference training symbol from a storage device; and

generating the channel estimate based on a product of the received training symbol and the inverse.

10. (original) The method of claim 5, wherein the step of generating the channel estimate includes reversing the sign of the received training symbol.

11. (original) The method of claim 10, wherein the step of generating the channel estimate further includes extracting the training symbol from a HIPERLAN/2 transmission.

12. (original) The method of claim 5, wherein the step of generating the second quantity includes quantizing the magnitude squared of the channel estimate to a power of two.

13. (original) The method of claim 5, wherein the step of generating the second quantity includes representing the second quantity as bits in a register and the step of generating the equalizer tap setting includes right shifting the bits in the register.

14. (original) An apparatus for initializing equalization operations in an Orthogonal Frequency Division Multiplexing ("OFDM") receiver, the apparatus comprising:

a tap initialization controller configured to

generate a channel estimate based on a received OFDM training symbol and a first quantity;

generate a second quantity based on a quantized magnitude squared of the channel estimate;

generate an equalizer tap setting based on a complex conjugate of the channel estimate and the second quantity;

generate an error based on a difference between one and a product of an existing equalizer tap setting and the channel estimate;

generate a subsequent equalizer tap setting based on the error and the existing equalizer tap setting; and

repeatedly generate the error and the subsequent equalizer tap setting until the error falls within predetermined limits.

15. (original) The apparatus of claim 14, further comprising an equalizer coupled to the tap initialization controller to receive the equalizer tap settings therefrom.

16. (original) The apparatus of claim 15, wherein the tap initialization controller is further configured to generate the subsequent equalizer tap setting based on a least-mean-squares ("LMS") algorithm.

17. (original) The apparatus of claim 15, wherein the tap initialization controller is further configured to retrieve an inverse of a reference training symbol from a storage device and generate the channel estimate based on a product of the received training symbol and the inverse.

18. (original) The apparatus of claim 15, wherein the tap initialization controller is further configured to reverse the sign of the received training symbol.

19. (original) The apparatus of claim 18, further comprising:

an OFDM training sequence extractor coupled to the tap initialization controller to provide the training symbol thereto, the training sequence extractor being configured to extract the training symbol from a HIPERLAN/2 transmission

20. (original) The apparatus of claim 15, wherein the tap initialization controller is further configured to quantize the magnitude squared of the channel estimate to a power of two.